

REMARKS

The applicants elect, with traversed, the subject matter of the Examiner's Group III, for further prosecution in the above. Reconsideration and withdrawal of the restriction requirement, and examination of all of the claimed subject matter, are requested.

The subject matter of the Examiner's Groups I-III is believed to define a single invention. Consideration of the following in this regard is requested.

The Examiner is understood to believe that the subject matter of the Examiner's Groups I-III lack the same or corresponding special technical features since Wang et al. (WO 99/58721) allegedly teaches a plurality of pairs of sense or antisense primers for multiplex amplification of target nucleic acids in a sample of nucleic acids of human origin.

The Applicant submit, with due respect, that the claims define a single invention.

Wang et al. discloses sets of primers suitable for multiplex amplification reactions, wherein:

said primers have both a hybridization segment and a constant segment (see page 3 lines 27-28),

said hybridization segment hybridizes to the template nucleic acid and said constant segment does not hybridize with the original template nucleic acid (see page 3 lines 29-32),

a single constant segment is used on all of the forward primers, and another constant segment is used on all of the reverse primers (see page 7 lines 2-4), and

the constant segment used for forward or reverse primers can be the same or not (see page 6 lines 29-30 and page 7 lines 13-14),

the constant segment is generally about 15 to about 35 base pairs, and should not hybridize to other constant segments or to the hybridization segments of the chimeric primers (see page 15 lines 31-34),

the two primers which are intended to amplify a specific target are chosen on the basis of several characteristics, including length, melting temperature (see page 16 lines 20-24).

Wang et al does not disclose that the primer has a sequence such that no primer can form, with itself or with another primer of the same plurality, complete or partial base pairing for which the variation in free energy DG associated with the formation of this possible pairing would be greater than 14 kcal/mol (see Frebourg et al. [0064]).

In addition, Wang et al only discloses a pair of constant segments (corresponding to the "nucleotide tag" to which the present application relates, SEQ ID NO:1 and 2) and no concrete chimeric primer.

Therefore, the Applicants submit that the Examiner's interpretation and finding of a lack of unity are unfounded and that the claims of the present application are linked to form a single inventive step.

Withdrawal of the restriction requirement and examination of all of the claimed subject matter are requested.

The species election requirement is traversed. The Examiner has not established that the specific sequences or pairs of sequences define separate

inventions. The sequences are related at least by their common function within the claimed invention.

Specifically, the hybridization segments described and claimed are all related to the use for exploring human chromosomal region 22q11 (see [0132]-[0143] of the USPTO published application). These hybridization segments are of use in determining the boundaries of the deletion which is observed in chromosomal region 22q11 in the context of DiGeorge syndrome.

Therefore, the applicant submit that the pair of antisense and sense hybridization segments should not be considered as unrelated to one another.

The Examiner's statement that sequences are "deemed to normally constitute independent and distinct inventions" (see page 3 of the Office Action dated May 23, 2006) should not be sufficient to shift the burden to the applicants to demonstrate that the sequences define a single invention, as suggested by the Examiner. The Examiner's comments amount to what should be an impermissible *per se* Rule. The applicants respectfully request that the Examiner provide some basis relating to the facts of the present claims for maintaining the requirement in the event the Examiner does maintain the requirement.

For the purpose of being responsive only, the applicants elect, with traverse, the pair of hybridization segments SEQ ID NO:3 and SEQ ID N0:4. The claims of the elected Group are believed to read on the elected species.

Withdrawal of the restriction and species election requirements are requested along with an early and favorable Action on the merits of all of the claimed subject matter are requested.

FREBOURG et al
Appl. No. 10/521,721
August 23, 2006

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



B. J. Sadoff
Reg. No. 36,663

BJS:
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100